

Single Substitution Data Sheet  
(Optional Sequence A)  
SXX

**Laboratory data and conditions:**

Operator	GH		
Date	6/25/03	Temperature	
Balance	H20	Pressure	
Load	100 g	Relative Humidity	
Standard deviation of the process, from control chart, $s_p$			0.015 mg

**Mass standard(s) data:**

ID	Nominal	Mass Correction*	Unc: From cal. report	Unc: k factor	Density g/cm <sup>3</sup>
$S$	100 g	0.531 mg	0.0112 mg	2	8.0
$X$	100 g	TBD	TBD	2	8.4
$sw$	20 mg	0.044 7 mg	0.000 65 mg	2	8.41
$t_x$	NA	---	---	---	---
$t_s$	NA	---	---	---	---
$S_c$	100 g	0.319 mg	0.025 mg	2	7.95

\*Mass Correction = *True Mass* if using buoyancy correction. Mass Correction = *Conventional Mass* if NOT using buoyancy correction. Density is used only with buoyancy corrections.

**Observations:**

Measurement No.	Weights	Balance Observations, Units <u>mg</u>		
Time: 9:10 am				
1 ( $O_1$ )	$S + t_s$		25	00
2 ( $O_2$ )	$X + t_x$		25	43
3 ( $O_3$ )	$X + t_x + sw$		45	50
Time: 9:14 am				

**Measurement Assurance (Duplication of the Process):**

Measurement No.	Weights	Balance Observations, Units <u>mg</u>		
Time: 9:15 am				
1 ( $O_1$ )	$S + t_s$		25	00
2 ( $O_2$ )	$S_c + t_{S_c}$		24	79
3 ( $O_3$ )	$S_c + t_{S_c} + sw$		44	86
Time: 9:19 am				

Note: dotted line represents decimal point.